48 WALL STREET NEW YORK/5

December 28, 1962.

The Secretary of State,
The Hon. William C. Foster, Director, Arms Control and Disarmament Agency, Washington 25, D. C.

Dear Secretary Rusk and Mr. . Foster:

I enclose four copies of a memorandum which you may wish to turn over to the scientists for appropriate analysis.

If you approve I would also suggest a copy be sent to the President for his information.

Sincerely yours,

Arthur H. Dean

(Enclosures)

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December 27, 1962

MEMORANDUM BY ARTHUR H. DEAN WITH RESPECT TO POSSIBLE SOLUTIONS FOR A NUCLEAR TEST BAN TREATY

- 1. In the immediate aftermath of Cuba and the Chi-Com attack on India there would appear to be little likelihood of the Soviet Union's agreeing to any effective number of internationally supervised detector stations on its territory equipped with proper and modern instrumentation, to their location in quiet areas or to the training of the USSR nationals on such stations.
- 2. There would also appear to be little likelihood that they would agree to any meaningful on-site inspections by an international commission of unidentified events. To get 'Soviet acceptance the invitations would either have to be "invitational" in accordance with the Eight-Power memorandum or would be in accordance with Ambassador Lall of India's proposal that the commission would first ascertain whether an invitation, if issued by the commission, would be honored so that if the answer to the query were in the negative no invitation would be issued and therefore there would be no breach of the treaty.
- 3. The proposils with respect to having two or three automatic stations on Soviet territory, according to Sir Solly Zuckerman, offers endless possibilities for argument as to the size, the equipment and location of

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such stations and the manner in which their data would be recorded, reported and processed. While this scientific work was going on the Soviets would in effect be demanding a further uninspected and uncontrolled moratorium with respect to seismic events.

In order to meet the projected USSR unilateral proposal that all further testing underground be stopped on an uninspected and uncontrolled basis, the following program is put forward for examination:

The scientists be asked how effective a set of stations in quiet locations with modern instrumentation would be if such stations could be located in Japan, Korea, Formosa, the Philippines, India, Afghanistan, and possibly Poland, by the United States and could be manned by the United States with appropriate number of local nationals.

If the answer of the scientists would be that such a set of stations might be more effective in detecting, locating and identifying seismic events than a relatively few automatic stations on Soviet territory plus some larger number of xxx automatic stations on the territories of countries contiguous to the Soviet Union, and if the scientific possibilities of such a system of stations would permit the detection, location and identification of all significant seismic events, the United States might be willing to say the following:

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- A. The United States will not ask for an international supervisory commission or for internationally supervised control posts manned by nationals on Soviet territory and will not ask for obligatory on-site inspections.
- B. The United States will announce unilaterally that it will not test in the atmosphere, under water or in outer space or underground as long as it has no evidence satisfactory to it that the USSR or any other state is not testing in any one of these environments.
- c. If the United States receives evidence satisfactory to it which leads it to believe that the USSR or any other state is testing in any one or more of these environments, then the United States reserves the full right to take any and all action as it may deem fit and proper with respect to the question of whether or not it will resume testing.

The foregoing proposal would seem to have the following disadvantages:

- (1) It is not a treaty and does not obligate the Soviet Union.
- (2) There will be no internationally supervised but nationally manned detection posts on the territory of the Soviet Union.







- (3) There will be no right of the commission to make obligatory on-site inspections of unidentified seismic events on the territory of the Soviet Union. This program is based upon the premise which must be carefully examined by the scientists that by the setting up of our own stations in nearby countries with proper equipment and properly manned, despite the fact that there are no properly placed detection posts on the territory of the Soviet Union and no right of on-site inspection of unidentified events, we can do as reasonably good a job as we would with internationally supervised but nationally manned posts in the territory of the Soviet Union.
- inspection of unidentified events on the territory of the Soviet Union. But even with some 8 to 10 detection posts with modern instrumentation and possibly located on the territory of the Soviet Union the problem of location and identification will still be great, and even if the USSR were to agree to having the commission make its own decision with respect to on-site inspections there is no assurance that the Soviet Union would in fact cooperate in actually permitting the commission to carry out these on-site inspections effectively and efficiently.
- (5) If the decision as to whether on-site inspections were to be left to a group of 17 scientists from each of

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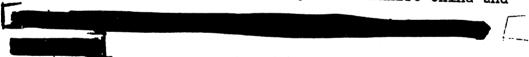
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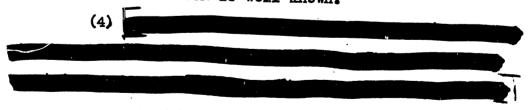
the countries which are parties to the treaty, if the scientists thought that their declaration there was an unidentified event which needed on-site inspection might lead to the denunciation of the treaty, then the fear of making such a political decision, or the pressures which might be put upon them not to do so, might lead them not to ask for the right to make on-site inspections for certain unidentified events. If so, the actual request to make an on-site inspection might never arise.

Advantages:

- (1) We design, equip and locate the stations.
- (2) We operate them ourselves.
- (3) We make our own decision as to whether there is an unidentified event and whether we have the right to resume testing and do not have to convince scientists from the non-aligned countries. Out of the eight nations, India and Burma are close geographically to Communist China and



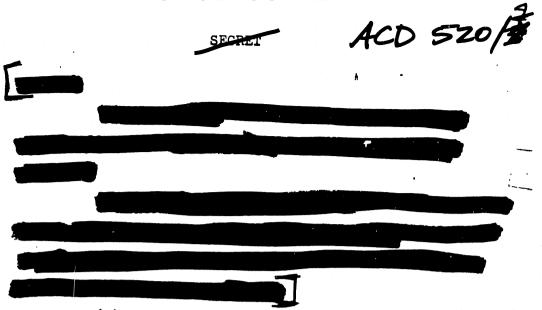
The Chi-Com attack on India and the rift between USSR and Chi-Com remain to be appraised. The relationship of the UAR and the USSR is well-known.



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- (7) Even if the Proposed system has scientific disadvantages it gives the United States certain moral advantages and arguments with the non-aligned nations as against either (a) a policy of agreeing to any uninspected and uncontrolled moratorium on seismic events following the unilateral declaration of the Soviet Union against testing, or (b) being forced by world opinion to agree that we will discontinue further underground tests without any provisions for detection posts or on-site inspections on Soviet territory or without any clear right to resume testing if we find violations.
- (8) It gives the United States control over the location and manning of the posts and control over the decisions.

If the program is handled in a highly objective scientific manner the fact that you do not have non-aligned nations concurring in the decision that there has been

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either a nuclear test or an unidentified event will be largely overcome.

If the foregoing proposal were cleared as satiffactory to the scientists it would of course have to be
cleared with Senator Russell of Georgia and with the Joint
Atomic Energy Committee in view of the statements that
have been made with respect to the proposed treaty and
with respect to resident supervision of the international
commission at nationally manned detection parts in the
territory of the Soviet Union.

Arthur H. Dean

December 28, 1962

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DEPARTMENT OF STATE EXECUTIVE SECRETARIAT

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SS# 20915

January 3, 1963

S - Mr. Swank

A carbon copy of the attached has been sent to ACDA. If S approves, we will forward a copy to Mr. Bundy's office for the President.

William H. Brubeck Executive Secretary

Attachment:

As stated.

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